

I CLAIM

1. Ear duct cleaning device, comprising a flexible tubular member equipped at one end with an inflatable element and at its opposite end with means of supplying a fluid at a certain pressure, where said inflatable element is coupled to means of controlling the inflation in a manner so that said inflatable element assumes, once inflated, a shape such that its radial extension with respect to the axis of said tubular member is considerably greater than that along the same axis.

2. Device according to claim 1, wherein said means of controlling the inflation of said inflatable element comprise means of limiting the extension of said inflatable element in the direction of the axis of said tubular member.

3. Device according to claim 2, wherein on said flexible tubular member, some means are provided for controlling the introduction of said member into the ear duct.

4. Device according to claim 3, wherein said means of controlling the introduction comprise a portion of an extensible wall arranged opposite a plurality of radial apertures appropriately positioned on said member, where said extensible wall forms a swelling protruding in a radial direction from said member (1) at a first admission of fluid, and where said swelling subsequently retracts for a further admission of fluid.

5. Device according to claim 2, wherein said means of limiting the extension of said inflatable element in the

direction of the axis of said tubular member comprise a tubular element said inflatable element is slipped over to, while sliding longitudinally in a sealed manner inside said tubular member, coaxially and concentrically to the same; wherein the end turned toward the outside of said tubular element carries means of blocking said inflatable element, while means are provided on the lateral wall of said tubular element for arresting the motion of the same, which are placed at a given distance from the end that said inflatable element is fitted upon, and are co-operating with the means of abutment present on the internal wall of said tubular member; wherein said tubular element maintains a continuity of fluid communication between said inflatable element and said means of supplying fluid at a given pressure.

6. Device according to claim 5, wherein said means of blocking said inflatable element on the end of said tubular element comprise a headpiece equipped with a holding bar capable of inserting itself into said tubular element, thus holding said inflatable element in between.

7. Device according to claim 6, wherein said headpiece is substantially rounded.

8. Device according to claim 6, wherein said headpiece is substantially built in the form of an elliptical cover.

9. Device according to claim 8, wherein said headpiece exhibits one or more helical contours on its lateral outer surface.

10. Device according to claim 6, wherein said headpiece is equipped with an internal pocket capable of containing

a fluid.

11. Device according to claim 1, wherein the mouthpiece of said inflatable element is fitted with a swelling capable of guaranteeing a sealed sliding motion of said tubular element inside said tubular member.

12. Device according to claim 1, wherein the said means of supplying a fluid at a certain pressure comprise syringe type means.

13. Device according to claim 12, wherein said syringe type means are equipped with means capable of preventing the extraction of the stem of said piston of said syringe.

14. Device according to claims 12, wherein said syringe-type means are fitted with means capable of preventing the removal of the piston from its position at the end of the run.

15. Device according to claim 1, wherein said means of supplying a fluid at a certain pressure comprise pumping means fitted with a pressure gauge connected to said tubular member by a conduit and operating means, while a check valve is being provided.

16. Device according to claim 1, wherein said flexible tubular member carries, on its outer wall, a plurality of reference markings on its position, at convenient intervals from each other.

17. Device according to claim 1, where said inflatable element is appropriately lubricated.

18. Device according to claim 1, wherein said inflatable element is formed so that when fully inflated it adheres to the walls of the ear duct, without any or with only a

minimal pressure on the same.

19. Device according to claim 1, wherein said inflatable element is fitted on its outer surface with a plurality of reinforcing ribs.

- 5 20. Method for using an ear duct cleaning device, comprising a flexible tubular member, provided at one end with an inflatable element and at the opposite end with means of supplying a fluid at a certain pressure, where said inflatable element is coupled to means of
- 10 controlling the inflation so that said inflatable element assumes, once inflated, a shape such that its radial extension with respect to the axis of said tubular member is considerably greater with respect to that along the same axis, comprising the phases of :
- 15 - introducing the inflatable element along the wall of the ear duct of the patient;
- inflating said inflatable element by means capable of supplying a fluid at a certain pressure;
- extracting said tubular member from said ear duct.